

What Is Claimed Is:

1. A method for activating a number  $n$  of electrical loads in a circuit assemblage,  $n$  being at least 2, the method comprising:

activating the  $n$  electrical loads by  $n$  pulse width modulated signals, wherein for the activating of the  $n$  electrical loads, the  $n$  pulse width modulated signals are generated in a time-offset so that an effective value of a direct current flowing in a supply lead to the  $n$  electrical loads is reduced.

2. The method of claim 1, wherein a filter for influencing electromagnetic compatibility is placed upstream from the  $n$  electrical loads.

3. The method of claim 1, wherein the time offset between the  $n$  pulse width modulated signals equals an  $n$ th part of a period of the pulse width modulated signals.

4. The method of claim 1, wherein the  $n$  electrical loads are activated with the  $n$  pulse width modulated signals at a pulse duty factor of  $1/N$ .

5. The method of claim 1, wherein at a pulse duty factor of  $1/N$ , the direct current, which is reduced by half as compared to an amplitude of a maximally permissible current, is generated in the supply lead to an electrical system of a motor vehicle.

6. The method of claim 1, wherein the  $n$  electrical loads are activated by power semiconductor components respectively associated with them, each of which has associated with it a separate activation line for transmission of the pulse width modulated signals.

7. An apparatus for activating  $n$  electrical loads,

comprising:

a filter to influence electromagnetic compatibility, the filter including an inductance arrangement and a capacitance arrangement; and

a microcontroller to activate the n electrical loads and to generate activation signals, for providing time-offset energization of n power semiconductor components, wherein the microcontroller includes a first output and a second output to which a first activation line and a second activation line are connected for activating the n power semiconductor components of the n electrical loads;

wherein the apparatus activates the n electrical loads by n pulse width modulated signals, wherein for the activating of the n electrical loads, the n pulse width modulated signals are generated in a time-offset so that an effective value of a direct current flowing in a supply lead to the n electrical loads is reduced.

8. The apparatus of claim 7, wherein the n power semiconductor components include at least one of MOSFET transistors, bipolar transistors, IGBT transistors and IGCT transistors.

9. The apparatus of claim 7, wherein a first electrical load and a second electrical load represents one of a double blower and a tandem blower, one of the electrical loads being associated with a radiator of an internal combustion engine and another of the electrical loads being associated with a heat exchanger of a vehicle climate control system of a motor vehicle.